

Waggle, Vince

From: Waggle, Vince
Sent: Monday, July 15, 2013 3:13 PM
To: Erik Bewley (erik.bewley@epa.state.oh.us)
Cc: Michelle Tarka; Beringer, Carrie; Davis, Jim; Masello, Evonne
Subject: Heritage Thermal Services Incidnet 7/13/13

Erik,
As a follow-up to the voice message that I left for you, here is a more thorough write-up on the incident at Heritage Thermal Services on Saturday. I have reported event through the Air Services program as well.

SCC Pressure Incident 7/13/13

On Saturday, July 13, 2013 at 12:59 p.m., Heritage Thermal Services (HTS) experienced an interruption of hazardous waste incinerator operations and initiated an immediate shutdown of the waste incinerator. The shutdown was the result of an over-pressurization of Secondary Combustion Chamber (SCC) caused by a large ash fall within the unit. Hot ash falling from the walls of the SCC flashed to steam when it contacted the cooler water of the Slag Quench Tank. The rapid expansion of air within the incineration system caused damage to the duct located between the Heat Recovery Boiler and Spray Dryer and a breach in the system. This breach allowed hot ash and steam to escape from the system. Some of the ash fell to the plant surface below the incineration system while a portion was expelled into the air. It has been reported some of the ash was deposited onto vehicles, homes, and lawns in the surrounding neighborhood to the west of the facility. HTS is currently investigating these claims. Air samples were also taken at four locations along the facility fence line and are being analyzed for contaminants.

Immediately upon experiencing the over-pressurization event, plant control equipment initiated an automatic cutoff of waste feeds and HTS control room operators began a controlled-shutdown of the incineration system. The event and subsequent damage to the system caused several of the incinerator's regulatory operating limits to be surpassed. The following list contains the operating limits that were exceeded during and after the malfunction:

Name	Start Time	End Time
SCC Pressure Using Seals	7/13/2013 12:59:25 PM	7/13/2013 1:00:28 PM
THC	7/13/2013 1:03:37 PM	7/13/2013 2:03:34 PM
SCC Temperature	7/13/2013 1:07:46 PM	7/13/2013 3:57:25 PM
Kiln Temperature	7/13/2013 1:18:38 PM	7/13/2013 3:57:24 PM
Process Gas Flow	7/13/2013 2:02:36 PM	7/13/2013 3:57:25 PM
THC	7/13/2013 2:25:48 PM	7/13/2013 2:57:23 PM
Scrubber ECIS Pressure	7/13/2013 2:25:49 PM	7/13/2013 3:57:25 PM

In addition to the exceedance of the limits listed above, visible emissions were observed from the facility at the time of the event and for several minutes following. During the shutdown, there was still a small amount of hot, un-combusted material within the system that continued to smolder. Some of these emissions escaped the system through the breach. The induced draft fan remained operational and was able to route most of the flue gas through the control devices.

Hot embers that were expelled from the system at the time of the event landed on some nearby pallets containing vermiculite and caught fire. This small fire was immediately extinguished by plant personnel. City fire crews arrived at the facility shortly after the event and offered assistance.

HTS is continuing to investigate the extent of the impact to the local community. With the help of local emergency management agencies and media, HTS has provided residents affected by the ash with instructions on how to clean up the material and prevent further contamination. In addition, HTS has sent personnel out into the local area to help with assess impact and conduct remediation activities.

HTS engineers and operations personnel are currently evaluating the damage done to the system. A planned outage to replace the unit's refractory was scheduled to begin on Sunday, July 14th. As a result of this event, this outage was started a day early and repairs will be made concurrently with the replacing of the refractory. There were no injuries as a result of this event nor was there any damage to other areas of the facility.

HTS will keep the Ohio EPA up to date on all of its findings related to this incident. Please do not hesitate to contact me if you should have any questions.

Sincerely,

Vince Waggle
Environmental Engineer
Heritage Thermal Services
1250 St. George Street
East Liverpool, OH 43920
Ph: 330-386-2182
Fax: 330-385-7813
vwaggle@heritage-thermal.com